

CLAIM AMENDMENTS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

1. (Currently Amended) An apparatus that establishes services that utilize policy-enabled resources in a communications network, comprising:

a first policy enforcement point (PEP) on a network element of the communications network that identifies policy-enabled resources that are available and allocates requested policy-enabled resources to services;

a first network resource controller (NRC) within a domain on the communications network that requests from available policy-enabled resources any policy-enabled resources within a first domain required to establish a particular service; and

a first resource policy layer (RPL) that establishes provisions, to a the particular service being established, and provisions the policy-enabled resources allocated to that particular service, said first resource policy layer including a first policy ~~description protocol decision point~~ (PDP),

wherein said first NRC initiates association between said first PEP and said first PDP,

16 said first PDP provides said first PEP with a policy upon establishment of
17 said association between said first PEP and first PDP, and

18 when said first NRC requires resources from a second domain outside the
19 first domain, said first NRC signals a request to a second NRC in said second
20 domain, which initiates association between a second PEP in said second domain
21 and said first PDP, said first PDP providing said second PEP with a policy upon
22 establishment of said association between said second PEP and said first PDP,

23 whereby there is a decoupling of policy management from the management of
24 policy-enabled resources.

1 2. (Previously Presented) The apparatus as defined in claim 1, wherein said
2 first PEP comprises a plurality of virtual PEPs, each virtual PEP being associated
3 to a respective service.

1 3-5. (Canceled)

1 6. (Currently Amended) The apparatus as defined in claim 1, wherein the
2 apparatus further comprises:
3 a second RPL associated with ~~a~~the second domain comprising a second PEP.

1 7. (Canceled)

8. (Previously Presented) The apparatus as defined in claim 1, wherein resource capability information descriptors are used for resource discovery and policy provisioning.

9. (Currently Amended) A method of establishing services that utilize policy-enabled resources in a communications network, comprising:

identifying, at a first policy enforcement point (PEP), policy-enabled resources within a first domain that are available and allocating requested policy-enabled resources to services;

requesting, from available policy-enabled resources at a first network resource controller (NRC) any policy-enabled resources required to establish a particular service;

establishing the particular service with a first resource policy layer (RPL);
and

provisioning, to ~~a the established service being established at a first resource policy layer (RPL), the policy-enabled resources allocated to that the established service, said first resource policy layer including at least one a first policy description protocol~~ decision point (PDP),

15 wherein said first NRC initiates association between said first PEP and said
16 first PDP, said first PDP provides said first PEP with a policy upon establishment
17 of said association between said first PEP and first PDP, and

18 when said first NRC requires resources from a second domain outside the
19 first domain, said first NRC signals a request to a second NRC in said second
20 domain, which initiates association between a second PEP in said second domain
21 and said first PDP, said first PDP providing said second PEP with a policy upon
22 establishment of said association between said second PEP and said first PDP,

23 whereby there is a decoupling of policy management from the management of
24 policy-enabled resources.

1 10. (Canceled).

1 11. (Currently Amended) The method as defined in claim 9, wherein virtual
2 PEPs of ~~a main~~ the first PEP are provisioned to provide resource services.

1 12. (Previously Presented) The method as defined in claim 11, wherein the
2 virtual PEPs are provisioned to provide services in said second domain.

1 13. (Previously Presented) The method as defined in claim 12, wherein said first
2 PEP and said second PEP are provisioned with the same service by said first PDP.

1 14-16. (Canceled)

1 17. (Currently Amended) The apparatus as defined in claim 1, wherein the first
2 PEP and the second PEP are virtual PEPs created upon request for ~~said a~~
3 particular service by one of the first NRC and the second NRC.

1 18. (Currently Amended) The method as defined in claim 9, wherein the first
2 PEP and the second PEP are virtual PEPs created upon request for ~~said a~~
3 particular service by one of the first NRC and the second NRC.

1 19. (Currently Amended) An apparatus that establishes services that utilize
2 policy-enabled resources in a communications network, comprising:

3 a first network resource controller (NRC) within a domain on the
4 communications network, said first NRC requesting, from available policy-enabled
5 resources, any policy-enabled resources required to establish a particular service;

6 a virtual first policy enforcement point (PEP) created upon requesting the
7 particular service, said virtual PEP identifying policy-enabled resources that are
8 available and allocating requested policy-enabled resources to the particular
9 service;

10 | a resource policy layer (RPL) that establishes the particular service and
11 | includes including a policy description protocol decision point (PDP),
12 | wherein the virtual PEP is provided with information to contact the PDP of
13 | the RPL in order to provision the policy-enabled resources allocated to the
14 | particular service.

1 | 20. (Currently Amended) A method of establishing services that utilize
2 | policy-enabled resources in a communications network, comprising:

3 | requesting, from available policy-enabled resources at a first network
4 | resource controller (NRC), any policy-enabled resources required to establish a
5 | particular service;

6 | creating a virtual first policy enforcement point (PEP) upon requesting the
7 | particular service;

8 | identifying, at the virtual PEP, policy-enabled resources that are available
9 | and allocating requested policy-enabled resources to the particular service;

10 | providing the virtual PEP with information to contact a policy ~~description~~
11 | ~~protocol~~ decision point (PDP) of a resource policy layer (RPL);

12 | establishing the particular service with a first resource policy layer (RPL);
13 | and

provisioning, to the ~~particular established~~ service being established at the
resource policy layer (RPL), the policy-enabled resources allocated to the particular
service.